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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,359	08/01/2003	Gary Wingett	878.0030.U1(US)	3984
29683	7590	05/05/2006	EXAMINER	
HARRINGTON & SMITH, LLP 4 RESEARCH DRIVE SHELTON, CT 06484-6212				PYO, KEVIN K
		ART UNIT		PAPER NUMBER
		2878		

DATE MAILED: 05/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.	10/632,359	Applicant(s)	WINGETT ET AL.
Examiner	Kevin Pyo	Art Unit	2878

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) Responsive to communication(s) filed on 14 April 2006.  
2a) This action is FINAL. 2b) This action is non-final.  
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) Claim(s) 1-7,9,11 and 13-19 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) Claim(s) \_\_\_\_\_ is/are allowed.  
6) Claim(s) 1-7,9,11 and 13-19 is/are rejected.  
7) Claim(s) \_\_\_\_\_ is/are objected to.  
8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) The specification is objected to by the Examiner.  
10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) Notice of References Cited (PTO-892)  
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) Notice of Informal Patent Application (PTO-152)  
6) Other: \_\_\_\_\_.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-7, 9, 11, 15 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawai et al (Japanese Patent Publication JP-08029202).

Regarding claims 1, 2, 5, 9, 15 and 17, Kawai et al shows in Figs. 1 and 6 a source of electromagnetic radiation (30), a detector (40) for sensing electromagnetic radiation; and an element (2) located in a path between the source and the detector, wherein the element providing multiple set of electromagnetic radiation transmission (paragraph 0015, lines 4-6; paragraph 0016, lines 1-2), each set comprising a plurality of areas (72-74 in Fig.6) having respectively different electromagnetic radiation reflection characteristics for reflecting respective different amounts of electromagnetic radiation from the source to the detector, wherein the areas are arranged to provide a directionally unique sequence of transmission characteristics along the path traced on rotation of the rotatable member, and wherein the sets from multiple repetitive sequence about the element (paragraph 0015, lines 4-6).

Regarding claims 3 and 4, Kawai et al shows in Fig.2 an optical head (4) comprising a source (30) and a detector (40) is located for rotation with a rotatable member (in Fig.2, elements 2-4 are coupled via a shaft).

Regarding claim 6, Kawai et al shows in Fig.6 three different areas (72-24) are repeated in a same order on a surface of the element.

Regarding claim 7, Kawai et al shows in Figs.3 and 5 a rotatable member (2) is movable in an axis perpendicular to a plane of rotation of the rotatable member.

Regarding claim 11, Kawai et al discloses in paragraph [0026] the use of a transparency type optical disc.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 14, 16, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada (6,351,657) in view of Kawai et al.

Regarding claims 14 and 16, Yamada differs from the claimed invention in that its device utilizes a mechanical encoder, as opposed to the claimed invention that utilizes an optical encoder comprising an optical source and detector. However, it would have been obvious to one of ordinary skill in the art to modify the device of Yamada by replacing a mechanical encoder with an optical encoder of Kawai et al for the purpose of lengthening the lifespan of elements by optical contactless operation.

Regarding claims 18 and 19, Yamada shows in Fig.6 a display and a rotatable member (1a) are located on a front face of a device.

5. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawai et al.

Regarding claim 13, Kawai shows in Fig.6 pits (72-74) comprising the same width. In addition, Kawai discloses in paragraph [0016], lines 1-2 that the configuration, a dimension and a reflection factor for the pits (72-74) can be adjusted so that different electromagnetic radiation transmission characteristics for pits can be achieved. It would have been obvious, if not inherent, to one of ordinary skill in the art to recognize that pits of different dimension (length) with each having a uniform reflection level and pits having the same dimensions (same size) with different reflection levels would provide the same end result.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Pyo whose telephone number is (571) 272-2445. The examiner can normally be reached on Mon-Fri (with flexible hour), First Mon. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps can be reached on (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kevin Pyo  
Primary Examiner  
Art Unit 2878

Pkk  
4/25/06